## ABSTRACT OF THE DISCLOSURE

An information processing device, for aiding operations relating to position and orientation of a virtual object positioned in three-dimensional space, comprises: an imagetaking unit for taking images in real space in order to display the virtual object in a superimposed manner on real space; a synthesizing unit for synthesizing a virtual object with the taken image; an operating unit for operating the position and orientation of the virtual object; an aiding unit for obtaining a three-dimensional position of real space from external instructions, and obtaining a constraining shape for aiding in operations for the position and orientation of the virtual object; wherein the position and orientation of the virtual object are operated by instructions from the operating unit, based on constraint conditions based on the constraining shape obtained by the aiding unit. Thus, constraining shapes can be dynamically created in a compounded space, and virtual objects can be readily operated using constraining shapes even where constraining shapes have not been registered beforehand.